CHAPTER 1

The Year in Review and the Years Ahead

The expansion of the U.S economy continued for the fifth consecutive year in 2006. Economic growth was strong, with real gross domestic product (GDP) growing at 3.4 percent during the four quarters of 2006. This strong economic growth comes in the face of numerous headwinds and resulted from the inherent strengths of the U.S. economy and pro-growth policies such as tax relief, regulatory restraint, and opening foreign markets to U.S. goods and services. Growth in the first quarter rebounded from the effects of the 2005 hurricanes, including a recovery in consumer confidence and consumer spending, and the rebuilding of oil and natural gas infrastructure in the Gulf of Mexico. Although growth slowed in the middle two quarters of the year, the overall pace of real activity was strong in the face of near-record inflation-adjusted prices of crude oil and a sharp decline in home construction. On the inflation front, energy prices fell substantially towards the end of the year, allowing overall consumer price inflation to moderate in 2006; however, price inflation increased for goods and services other than food and energy. In response to these output and inflation developments, the Federal Reserve continued raising the federal funds rate through June, and then held it constant for the rest of the year. The Administration forecast calls for the economic expansion to continue in 2007, but we must continue to pursue pro-growth policies such as those designed to keep tax relief in place, restrain government spending, slow the rate of health care inflation, enhance national energy security, and expand free and fair trade.

This chapter reviews the economic developments of 2006 and discusses the Administration's forecast for the years ahead. The key points of this chapter are:

- Real GDP posted strong 3.4 percent growth in 2006, up from the 3.1 percent 2005 pace. The composition of aggregate demand changed from preceding years. More growth came from exports and business structures investment, while residential investment flipped from contributing to GDP growth in 2005 to subtracting from it in 2006.
- Labor markets continued to strengthen, with the unemployment rate descending to 4½ percent in the fourth quarter , and payroll job growth averaging 187,000 per month.
- Energy prices, which rose through August and then declined, dominated the movement of overall inflation in the consumer price index. Core inflation (which excludes food and energy inflation) moved up from 2.2 percent during the 12 months of 2005 to 2.6 percent in 2006, with much of this upward trend due to an acceleration in the amount that

renters pay for apartments and other rental properties and the estimated rent on owner-occupied housing. Energy prices fell sharply from September through October, and core inflation fell toward the end of the year.

- Real average hourly earnings accelerated to a 1.7 percent increase during the 12 months of 2006, reflecting solid labor markets combined with tamer energy prices.
- The Administration's forecast calls for the economic expansion to continue in 2007 and beyond, although the pace of expansion is projected to slow somewhat from the stronger growth of recent years. The unemployment rate is projected to edge up slightly in 2007, while remaining below 5 percent. Real GDP growth is projected to continue at around 3 percent in 2008 and thereafter, while the unemployment rate is projected to remain stable and below 5 percent.

Developments in 2006 and the Near-Term Outlook

The economy went through a period of rebalancing during 2006, with faster growth in business structures investment and exports partially offsetting pronounced declines in homebuilding. At the same time, consumer spending continued to grow.

Consumer Spending and Saving

Consumer spending sustained its strong growth during the four quarters of 2006 (rising 3.7 percent in real terms), continuing its 15-year pattern of rising faster than disposable income. Several factors helped to keep spending elevated, and as a result, kept saving down (according to the official definition in the national income and product accounts (NIPA)). These factors included rising energy costs (through the third quarter), rising wealth, and falling unemployment rates. As a result, the personal saving rate fell to a negative 1.0 percent for the year as a whole—its lowest annual level during the post-World War II era. Despite the negative saving rate, Americans continue to build wealth in the form of *capital gains* (the rise in asset prices), which are not included in the definition of saving in the NIPAs. The declining saving rate continues a long-term trend which began in the 1980s.

Energy Expenditures

World demand for crude oil increased from 79.74 million barrels per day in 2003 to 84.18 million barrels per day during the first three quarters of 2006. The United States accounted for about one-eighth (0.5 million barrels per day) of this higher (4.4 million barrel per day) pace of crude oil consumption. Most

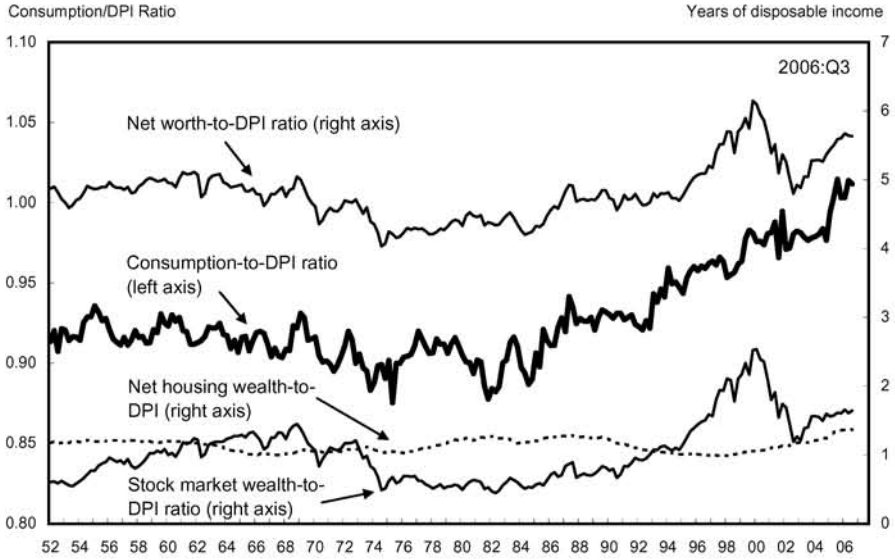
of this increase in world demand was accounted for by non-OECD countries (up 4.1 million barrels per day). Consumption of the non-U.S. OECD countries fell 0.2 million barrels per day. In the face of this increase in world oil demand, the supply available to U.S. consumers was restrained, and consumers paid higher prices to maintain their consumption.

With the rise in energy prices, nominal energy purchases rose sharply. That consumers altered their spending patterns only slightly contributed to the fall in the saving rate. Consumer energy prices increased 29 percent relative to nonenergy prices (according to the NIPA price indexes) from the fourth quarter of 2003 to the fourth quarter of 2006, while real consumption of energy per household fell only slightly, by 2.1 percent. Between 2004 and 2006, consumers appear to have maintained both energy and nonenergy consumption by reducing their saving. Consumers' response to persistently high energy prices is likely to emerge gradually, as consumers economize on energy consumption and possibly on nonenergy consumption.

Wealth Effects on Consumption and Saving

The rise in household wealth has also played a role in the decline of the saving rate. During the late 1990s and again during the past 3 years, a strong rise in household net worth coincided with a sizeable increase in consumer spending relative to disposable personal income (see Chart 1-1).

Chart 1-1 **Consumption and Net Worth (Relative to Disposable Personal Income)**
Consumption gains from 2004 to 2006 were partly supported by an increase in net worth (wealth), with rises in housing and stock market wealth accounting for most of this increase.



Sources: Department of Commerce (Bureau of Economic Analysis), Federal Reserve Board, and Council of Economic Advisers.

Despite the negative saving rate during 2006, Americans continued to build wealth because of capital gains. During the four quarters ending in the third quarter of 2006, the household wealth-to-income ratio increased 0.04 years, to 5.63 years of income. (The units of the wealth-to-income ratio are years because wealth is measured in dollars while income is measured in dollars per year. That is, total household wealth in the third quarter of 2006 represents the equivalent of 5.63 years of accumulated income.) More than half of the increase during these four quarters was accounted for by an increase in stock market wealth. Housing wealth (net of mortgage debt) also edged up relative to income over these four quarters, but by much less than its increases during the preceding 2 years. By the third quarter of 2006, the overall wealth-to-income ratio was well above the ratio over most of the past 50 years.

Personal and National Saving

Consumer responses to the rise in energy prices and increases in the wealth-to-income ratio lowered the personal saving rate to negative 1.0 percent in 2006. The *personal saving rate,* the rate at which households save, has been declining since the mid-1980s.

Corporate net saving takes the form of retained earnings which are not paid out to shareholders. (*Net* saving excludes funds used to replace worn out capital goods.) Retained earnings add to the wealth of corporate shareholders and supply funds for new investment. Corporate net saving rose to 3.8 percent of gross domestic income (GDI) during the first three quarters of 2006, its highest level since the 1960s. (GDI is the economy-wide sum of all sources of income and differs from GDP only by measurement error.) But even with these high levels of net corporate saving, *net private saving* (the sum of personal and corporate saving) was only 3.1 percent of GDI during the first three quarters of 2006, near its lowest level in the post-war period.

A still broader measure of net saving—*net national saving*—is the sum of government and private (personal plus corporate) net saving. When the Federal government runs a deficit (spends more than it collects in tax revenue), Federal saving is negative, as it was in 2006. Because the Federal deficit declined substantially in 2006, and because corporate saving rose, net national saving (which was negligible in 2005) rose to 2.0 percent of GDI during the first three quarters of 2006, its highest level since early 2002. *Gross* national saving, which includes funds for replacing worn out capital goods, is higher than net saving (13.8 percent versus 2.0 percent during the first three quarters of 2006), but shows similar historical fluctuations.

Projected Consumer Spending

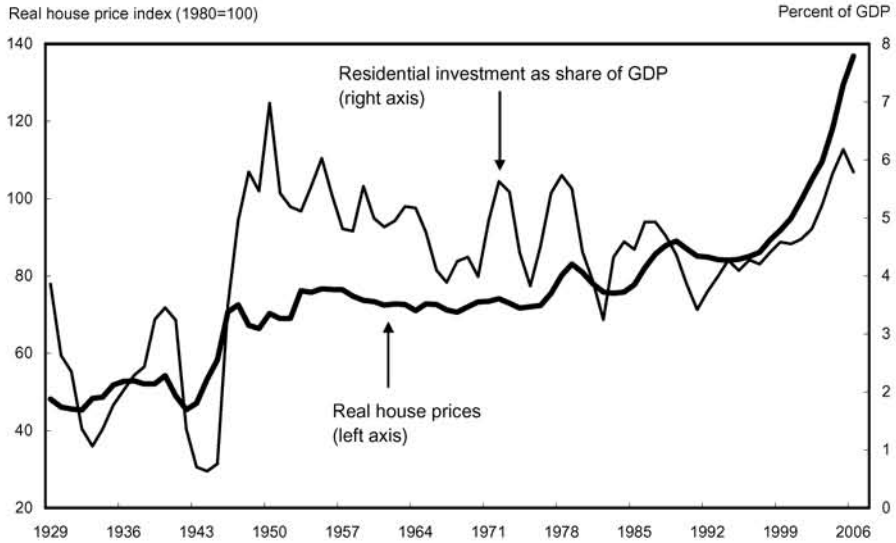
Looking ahead, real consumer spending during the four quarters of 2007 is expected to grow less than 3 percent, down from an average of 3.5 percent during the past 3 years. This projected rate is slightly less than the projected

2007 growth of *real disposable personal income* (household income less taxes, adjusted for inflation), and so the saving rate is forecasted to edge up. During the longer term, real consumption is projected to increase at about the same pace as real GDP and real income.

Housing Prices

Nationally, housing prices increased less in 2006 than in 2005. An inflation-adjusted version of the housing price index (the nominal version of which is compiled by the Office of Federal Housing Enterprise Oversight from new home sales and appraisals during refinancing) increased at an average annual rate of 6.4 percent from 2000 to 2005, and then slowed to a 2.6 percent annual rate of increase in the first three quarters of 2006. (These inflation-adjusted prices are deflated by the consumer price index.) Looking back, the cumulative increase in inflation-adjusted housing prices during the 6 years from 1999 to 2005 is one of the largest on record, exceeded only by the period immediately following the Second World War. Since 1929, periods of rising real prices have been linked to increases in the share of the gross national product allocated to home construction (see Chart 1-2). The 6.4 percent annual rate of increase in the relative price of housing from 2000 to 2005 was associated with an increase in the residential construction share of GDP from 4.6 percent to 6.2 percent.

Chart 1-2 **Residential Investment and House Prices**
Real house price increases in 1944-46, 1977-79, and 1999-2005 led to rises in the share of GDP devoted to residential investment.



Source: Bureau of Economic Analysis; real house prices from 1929-1975 are courtesy of Robert Shiller; real house prices 1975-2006 are from the Office of Federal Housing Enterprise Oversight (OFHEO) and are deflated by the CPI-U-RS from the Bureau of Labor Statistics; 2006 real house price is the average of the 2nd and 3rd quarters.

Although relative housing prices (that is relative to the consumer price index (CPI)) increased in almost all metropolitan areas during the 5 years from 2000 to 2005, the increases were concentrated in a few high-profile markets; increases in most areas were only modest. For example, real prices in Los Angeles increased at a 14.3 percent annual rate, but real price increases in 71 percent of metropolitan areas were less than the 6.4 percent national average. Most house price changes reflect local conditions (such as local economic and population growth, tastes, and geographic and zoning limitations on construction). In areas with restricted supply, small changes in demand may translate into large price changes.

Although house-price increases during these 5 years were concentrated in a few markets, the decline in mortgage rates from 2000 to 2005 was one common factor that may have helped raise home prices across the nation. Because of the drop in mortgage rates, prices could increase 4.4 percent per year during this period without raising the monthly mortgage payment.

Residential Investment

Every major measure of housing activity dropped sharply during 2006, and the drop in real residential construction was steeper than anticipated in last year's *Report*. New home sales fell 27 percent from a peak in October 2005 through July 2006, a period when rates on conventional mortgages moved up about 70 basis points. (A basis point is one one-hundredth of a percentage point.) Sales then edged up during the 5 months from August through December, when mortgage rates dipped lower. Builders reacted sharply to the early-2006 drop in sales so that housing starts, which peaked at an annual rate of 2.27 million units in the beginning of the year, fell to slightly more than 1.6 million units by the end of the year. The drop in home construction activity subtracted roughly 0.7 percentage point from the annual rate of real GDP growth in the second quarter, and 1.2 percentage points in the second half of the year. Furthermore, even if housing starts level off at their current pace, normal lags between the beginning and completion of a construction project imply that residential investment will subtract from GDP growth during the first half of 2007.

During 2006, employment in residential construction fell, as did production of construction materials and products associated with new home sales (such as furniture, large appliances, and carpeting). Yet despite these housing sector declines, the overall economy continued to expand (see Box 1-1).

Box 1-1: Indirect Effects of the Housing Sector

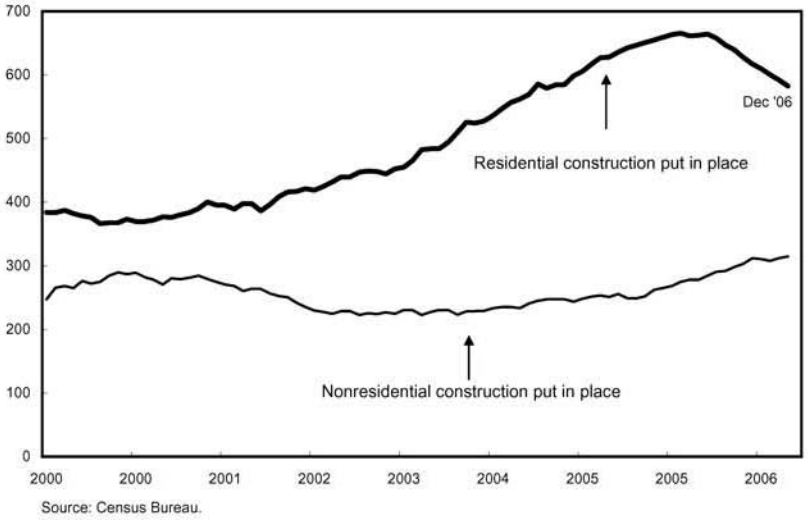
Thus far, the sharp drop in homebuilding has had few consequences for the rest of the economy. Employment fell in sectors related to new home construction and housing sales. Despite these repercussions, overall payroll employment continued to increase, the unemployment rate continued to fall, and real consumer spending continued to move upward through the end of 2006.

Although residential investment fell sharply, real GDP growth during 2006 was sustained by increases in other forms of investment. As can be seen in the chart below, private nominal nonresidential construction (that is, business construction of office buildings, shopping centers, factories, and other business structures) grew rapidly in the first three quarters of the year and moved up a bit further in the fourth quarter. Nonresidential construction draws from some of the same resources (such as construction labor and materials) as the residential construction sector. The high level of residential investment during the past couple of years may have limited the growth of investment in nonresidential structures. While the case for housing crowding out other sectors is strongest for nonresidential investment, residential investment competes with all other sectors of production in credit and labor markets. A drop in the share of the economy engaged in housing could provide some room for other sectors to grow.

Private Construction

Although residential construction has fallen sharply from its peak, nonresidential investment continues to grow and absorb some of the resources formerly used in the residential sector.

Dollars (billions), seasonally adjusted at an annual rate



Source: Census Bureau.

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Box 1-1 — *continued*

The housing market could also affect the rest of the economy through the wealth channel. That is, declines in housing prices could reduce household net worth and thereby reduce consumption. The increase in housing prices during 2000–2005 contributed noticeably to the gain in the ratio of household wealth to income (shown earlier in chart 1-1) and supported growth in consumer spending. Some of this support may have been facilitated by homeowners taking out larger mortgages after their homes appreciated in value. In contrast, housing wealth decelerated in the second and third quarters of 2006, while the stock market accounted for most of the gain in the wealth-to-income ratio. Thus far, national measures of housing prices have not declined, and negative effects through the wealth channel have not occurred.

In addition to incomes and mortgage rates, the number of homes built is underpinned by demographics. Homebuilding during 2004 and 2005 averaged about 2.0 million units per year, in excess of the roughly 1.8-to-1.9-million unit annual pace of starts that is consistent with the pace of household formation implied by demographic models. As a result, the pace of homebuilding will tend to be drawn below this level for long enough so that the above-trend production of 2004 and 2005 will be offset by below-trend production. The construction of new homes has fallen rapidly, however, and this offset may well be complete sometime during 2007. Looking further ahead, the residential sector is not expected to make noticeable positive contributions to real GDP growth until 2008 and beyond.

Business Fixed Investment

During 2006, real business investment in equipment and software grew 5 percent, slower than the 7 percent average pace during the 3 previous years. Its fastest-growing components included computers, as well as machinery in the agricultural and service sectors. Investment in mining and oil field machinery was also strong, likely in response to elevated crude oil prices, and to the need to replace Gulf of Mexico facilities damaged by the 2005 hurricanes. Investment in heavy trucks has been solid throughout 2006 as trucking firms have been buying in advance of new environmental regulations (on particulate matter emissions issued in 2000 that became effective in 2007), which will raise heavy truck prices in 2007. Aircraft investment, however, declined sharply for the second consecutive year. Software investment posted a strong 7.9 percent gain in 2006, but since 2000, it has grown at only a 3.7 percent annual rate, a noticeable deceleration from the roughly 16 percent annual rate of growth during the 1990s.

The turnaround in investment in business structures (that is, nonresidential construction) during 2006 has been dramatic, with growth at 12 percent, up from an anemic 2 percent gain during 2005. Growth in 2006 was strongest for office buildings, multi-merchandise centers, lodging facilities, and recreational structures. Investment in petroleum and natural gas structures also grew rapidly, reflecting high petroleum and natural gas prices and the reconstruction of the Gulf of Mexico capacity. Investment continued to fall, however, in air transportation structures and medical buildings.

Business investment growth is projected to remain strong in 2007, somewhere in the neighborhood of the 9 percent annual rate of growth during the first three quarters of 2006. Continued growth in output combined with a tight labor market are expected to maintain strong demand for new capital equipment at the same time as corporations are flush with funds for these investments. The financial environment for these investments is favorable. *Cash flow* (the internally generated funds that are available for corporate investment) was at a record 10.3 percent average share of GDP in the first three quarters of 2006, while nonresidential investment (at 10.5 percent of GDP) was close to its historical average. In the longer run, business investment is projected to grow only slightly above the growth rate of real GDP.

Business Inventories

Inventory investment was fairly steady during 2006, and had only a minor influence on quarter-to-quarter fluctuations. Real nonfarm inventories grew at an average $44 billion annual pace during 2006, a 3.0 percent rate of growth that is roughly in line with the pace of real GDP growth over the same period. Coming off a long-term decline, the inventory-to-sales ratio for manufacturing and trade (in current dollars) remained relatively flat during the first half of the year, but began to pick up in August.

Inventory investment is projected to be approximately stable during the next several years, as is generally the case for periods of stable growth. The overall inventory-to-sales ratio is expected to continue trending lower.

Government Purchases

Real Federal consumption and gross investment grew 2.4 percent during 2006. This was the third consecutive year of growth at roughly 2 percent. Defense spending accounted for all of the increase during the four-quarter period, while nondefense purchases fell. The quarterly pattern of these Federal purchases has been volatile with sizeable increases in the first and fourth quarters of the year. Most of the first-quarter surge was in defense components.

Federal outlays (which include purchases, investment, and transfers such as Social Security) were boosted by a $111 billion appropriation in fiscal year

(FY) 2006 for reconstruction and relief efforts arising from the 2005 hurricanes. In addition, the supplemental defense spending package for ongoing operations in Afghanistan and Iraq was $70 billion for FY 2006 and was passed in mid-June. An additional $70 billion emergency funding was provided in the regular defense appropriation act passed at the end of September 2006. Another supplemental appropriation for defense is likely for FY 2007.

Nominal Federal revenues grew 15 percent in FY 2005 and 12 percent in FY 2006. These rapid growth rates exceeded growth in outlays and GDP as a whole, and the U.S. fiscal deficit as a share of GDP shrank from 3.6 percent in FY 2004 to 2.6 percent in FY 2005 to 1.9 percent in FY 2006.

State and local government purchases rose 3 percent during 2006, up noticeably from rates below 1 percent during each of the 3 previous years. In the wake of the 2001 recession, this sector fell sharply into deficit in 2002. Revenues began to recover in 2003, and by the first half of 2006 the sector was out of deficit, allowing for an increase in state and local consumption and investment. This pattern of delayed response to downturns resembles the past several business-cycle recoveries.

Exports and Imports

Real exports of goods and services grew 9.2 percent during 2006, up from the 6.7 percent export growth over the four quarters of 2005. This acceleration reflects rapid growth among our trading partners. Real GDP among our OECD trading partners grew 2.9 percent during the four quarters of 2005, and is estimated to have grown at the same pace in 2006. In addition, the economies of some of our major non-OECD trading partners such as China, Singapore, and India are growing at rates of 7 to 10 percent per year, although these countries comprise only about 7 percent of our exports.

The fastest growth in U.S. goods and services exports was to India, but exports to China, Africa, and Latin America also grew rapidly. Despite the rapid export growth to these emerging economies, the European Union (EU) remains the major export destination, consuming nearly 25 percent of our exports. Within the EU, Great Britain's imports of American goods and services grew at a notable 18 percent annual rate during the first three quarters of 2006.

Real imports grew 3.1 percent in 2006, a slower pace than the 5.2 percent increase over the four quarters of 2005. Petroleum imports, which grew strongly in the fourth quarter of 2005 to replace production losses after the hurricanes, declined 10 percent during the four quarters of 2006. Real imports of nonpetroleum goods grew 5.3 percent over the same period, down slightly from the year-earlier pace.

The *current account deficit* (the excess of imports and income flows to foreigners over exports and foreign income of Americans) jumped to 7.0 percent of GDP in the fourth quarter of 2005, partly due to petroleum imports that replaced lost Gulf of Mexico production. The current account deficit then retraced some of its earlier increase in the first three quarters of 2006, when oil imports declined. It appears to have fallen further in the fourth quarter, reflecting the drop in prices of imported crude oil. Current account deficits mean that domestic investment continues to exceed domestic saving, with foreigners financing the gap between the two.

Employment

Nonfarm payroll employment increased 2.2 million during the 12 months of 2006, an average pace of about 187,000 jobs per month. The unemployment rate declined by 0.4 percentage point during the 12 months of the year to 4.5 percent. The average unemployment rate in 2006 (4.6 percent) was below the averages of the 1970s, the 1980s, and the 1990s.

Job gains were spread broadly across major sectors in 2006, with the natural resource and mining sector (which includes oil and natural gas extraction) experiencing the fastest growth rate (8.1 percent), likely due to increased demand for energy products. The service-providing sector accounted for 95 percent of job growth during the 12 months of 2006, a slightly larger contribution than would be suggested by its 83-percent share of overall employment. Within the service-providing sector, 24 percent of job growth was in professional and business service jobs. As noted, the service-providing sector accounted for almost all of the 2006 job gains. The goods-producing sector accounted for the remaining 5 percent of the gains (notably weaker than its 17-percent share of overall employment), a continuation of the long-term trend under which the goods-producing share of total employment has fallen in each of the past five decades. Within the goods-producing sector, employment growth during 2006 was concentrated in mining and construction, while manufacturing employment decreased for the ninth consecutive year.

Jobless rates fell among most major demographic segments of the population during the 12 months of 2006. The unemployment rate dropped for each of the four educational-attainment groups (less than high school, high school, some college, and college graduates). For the second consecutive year, the drop in the unemployment rate was most pronounced among those without a high school degree. After falling 0.8 percentage point during 2005 (when the overall rate fell 0.5 percentage point), the jobless rate in this group fell another 0.7 percentage point during the 12 months of 2006 (when the overall unemployment rate fell 0.4 percentage point). By race and ethnicity, the unemployment rate fell the

most during 2006 among Asians, Hispanics and blacks (1.4, 1.1 and 0.9 percentage points), in contrast to 0.2 percentage point for whites. By age, the jobless rate fell most among workers 25 to 34 years old. By sex, the jobless rate fell more among adult women than adult men.

Furthermore, the median duration of unemployment, an indicator that typically follows the business cycle with a substantial lag, declined from its December 2005 level of 8.5 weeks to a December 2006 level of 7.3 weeks, close to its historical average. The number of long-term unemployed (those out of work for more than 26 weeks) fell by 263,000 during the year.

The Administration projects that employment will increase at a pace of 129,000 jobs per month on average during the four quarters of 2007. In the long run the pace of employment growth will slow, reflecting the aging of the population and the diminishing rates of labor force growth. The Administration also projects the unemployment rate will average 4.6 percent over 2007, before edging up to 4.8 percent in 2008 and beyond.

Productivity

Labor productivity growth usually increases during the early stage of a business-cycle recovery but then falls somewhat as the cycle matures. Early in this most recent expansion, productivity grew at a remarkable 3.9 percent annual rate for the years 2002 and 2003 and then slowed to a 2.6 percent annual rate for the years 2004 and 2005. Overall productivity has grown at a vigorous 3.1 percent annual rate from the business-cycle peak in the first quarter of 2001 until the third quarter of 2006.

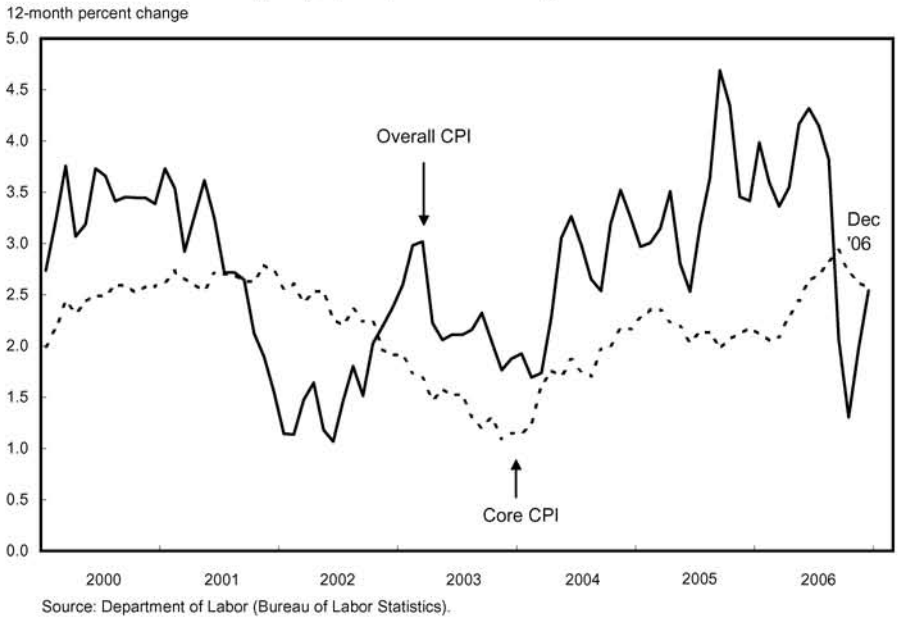
Although 1995 has been regarded as a watershed year for productivity because of the acceleration of productivity from a 1.5 percent to a 2.4 percent annual rate of growth, the further acceleration to a 3.1 percent annual rate of growth during 2001 to 2006 is striking, especially given a flat or diminished contribution from *capital deepening* (the increase in capital services per hour worked). (The time periods referred to are those shown in Table 1-2 later in this chapter.) The 1995–2001 acceleration may be plausibly accounted for by a pickup in capital deepening and by increases in organizational capital, the investments businesses make to reorganize and restructure themselves, in this instance in response to newly installed information technology. In contrast, capital deepening does not explain any of the post-2001 increase in productivity growth. The post-2001 acceleration in productivity therefore appears to be accounted for by factors that are more difficult to measure than the quantity of capital, such as continuing improvements in technology and business practices. (See *Chapter 2, Productivity Growth* for an extended discussion of this.)

Rather than assuming that the recent remarkable pace of productivity growth will continue, the Administration believes it is prudent to build a budget based on a forecast somewhat lower that the 3.1-percent pace of productivity growth since 2001. Productivity growth is projected to average 2.6 percent per year during the 6-year span of the budget projection—roughly equal to the average annual pace during the past decade.

Prices and Wages

As measured by the consumer price index (CPI), overall inflation fell from 3.4 percent during the 12 months of 2005 to 2.5 percent during 2006 (Chart 1-3). The drop in overall CPI inflation was almost entirely due to the deceleration of energy prices from a 17.1-percent increase in 2005 to a 2.9-percent increase in 2006. Food prices increased 2.1 percent during 2006, similar to the pace of the previous year. Core CPI prices (that is, excluding food and energy) increased 2.6 percent during 2006, up from a 2.2-percent increase a year earlier.

Chart 1-3 **Consumer Price Inflation**
Core CPI inflation moved up during the first 9 months of 2006, but then edged down. Energy inflation added to overall inflation through August, and pulled it down through November.



Source: Department of Labor (Bureau of Labor Statistics).

After rising sharply during 2004 and 2005, prices of petroleum products slowed to a 6.1 percent increase during the 12 months of 2006, as the sharp rise through August was reversed later in the year. Prices of natural gas, which had risen sharply during 2005, fell 14 percent during 2006. As of mid-January 2007, prices in futures markets suggested that crude oil prices will rise modestly during 2007, while natural gas prices will increase substantially.

The 0.4 percentage point acceleration of core CPI prices was accounted for primarily by rent of shelter (which consists primarily of rent paid by renters and by the rent on owner-occupied dwellings), which accelerated to a 4.3 percent rate of increase during the 12 months of 2006 from 2.7 percent in 2005. Some of the acceleration in core CPI prices may also have been a delayed reaction to the rapid increase in energy prices from mid-2003 to mid-2006, as the higher energy prices were absorbed into the prices of every service and commodity that requires inputs of energy or transportation. Econometric estimates (although imprecise) suggest that perhaps a quarter of a percentage point of the increases in the core CPI during the past year may be attributable to the past increases of these energy inputs. The Administration projects that the CPI will increase at a 2.6 percent annual rate during 2007 and 2008, about the same as the 2006 pace of the core CPI.

Hourly compensation (which is about 61 percent of nonfarm business output) has increased a bit faster in 2006 than in 2005. Nominal hourly compensation for workers in private industry increased 3.2 percent in 2006, up from 2.9 percent during the 12 months of 2005 according to the Employment Cost Index (ECI). All of this increase was from growth in wages and salaries (3.2 percent in 2006 versus 2.5 percent during 2005) while hourly benefits grew more slowly (3.1 percent versus 4.0 percent).

Another measure of hourly compensation published by the Department of Labor and derived from the National Income and Product Accounts has increased somewhat faster (at 4.3 percent) than the 3 percent increase in the ECI during the four quarters through the third quarter of 2006.

Unit labor costs have put little—if any—upward pressure on inflation thus far, and it appears unlikely that they will over the next year. Unit labor costs have increased at the same pace as the GDP price index, a 2.9 percent rate during the four quarters through the third quarter of 2006. The Administration expects the growth rate of hourly compensation to increase during 2007, as this nation's rapid productivity gains are shared by workers. But even with this acceleration in compensation, the expected strong pace of productivity growth will likely keep unit labor costs from putting upward pressure on inflation during 2007.

Moderate growth of hourly compensation and solid growth of productivity together with strong aggregate demand has driven the profit share of gross domestic income to its highest level since 1966.

Non-supervisory production-worker wages (which cover 82 percent of the private workforce) increased 4.2 percent (in nominal terms) during the

12 months through December 2006—an acceleration of 1.1 percentage points from the pace a year earlier. Real hourly wages of production workers increased 1.7 percent, a 2.1-percentage point acceleration from the pace a year earlier. The acceleration in real earnings reflects both the 1.1-percentage point increase in nominal wages and a 1 percentage point deceleration in consumer prices.

Among the many available measures of inflation, the Administration forecast focuses on two: the CPI and the price index for the GDP. The CPI measures prices for a fixed basket of consumer goods and services. It is widely reported in the press, and is used to index Social Security, the individual income tax, Federal pensions, and many private-sector contracts. The GDP price index covers prices of goods and services produced in the United States including consumption, investment, and government purchases. In contrast to the CPI, its weights are not fixed but move to reflect changes in spending patterns. Of the two indexes, the CPI tends to increase more rapidly in part because it measures a fixed basket of goods; the GDP price index increases less rapidly because it allows for households and businesses to shift their purchases away from items with increasing relative prices and toward items with decreasing relative prices. Among the differences, the GDP price index (which includes investment goods) places a larger weight on computers, which tend to decline in price (on a quality-adjusted basis). In contrast, the CPI places a much larger weight on rent and energy.

The "wedge," or difference between the CPI and the GDP measures of inflation, has implications for Federal budget projections. A larger wedge (with the CPI rising faster than the GDP price index) raises the Federal budget deficit because Social Security and Federal pensions rise with the CPI, while Federal revenue tends to increase with the GDP price index. For a given level of nominal income, increases in the CPI also cut Federal revenue because they raise the brackets at which higher income tax rates apply and affect other inflation-indexed features of the tax code.

During the 25 years from 1981 to 2005, the wedge between inflation in the CPI-U-RS (a historical CPI series designed to be consistent with current CPI methods) and the rate of change in the GDP price index averaged 0.32 percent per year. The wedge was particularly high during 2005 when the CPI increased 0.6 percentage point faster than the GDP price index. The wedge during 2005 reflected the 35 percent increase in crude oil prices, which have a larger weight in consumer prices (via their effect on refined-petroleum products) than in GDP as a whole. Because domestic production accounts for only about 35 percent of U.S. oil consumption, the weight of oil prices in GDP is roughly one-third of its weight in consumption. This effect unwound during the fourth quarter of 2006 when oil prices declined, causing the wedge to fall to -0.6 percentage point during the four quarters of 2006. From 2008 forward, the wedge is projected to average 0.3 percentage point.

Financial Markets

The Wilshire 5000 (a broad stock market index) increased 13.9 percent during 2006, while the Standard and Poor 500 (an index of the 500 largest corporations) increased 13.6 percent. This was the fourth consecutive year of stock market gains following 3 years of declines. The market has now recovered most of its losses since the March 2000 peak, at least in nominal terms.

Despite increases in short-term rates, yields on 10-year notes remained low, increasing only 9 basis points during the 12 months of 2006. The low level of long-term interest rates was due in part to low and stable long-run inflation expectations.

The Administration forecast of short term interest rates is roughly based on financial market data as well as a survey of economic forecasters. As of November 13, 2006, the date that the economic forecast was finalized, trading in financial futures suggested that market participants expected short-term rates to fall over the next several years, and the Administration's interest rate projections reflect those views. The Administration projects the rate on 91-day Treasury bills (5.1 percent on November 13) to remain flat in 2007 before edging down in 2008 and 2009. The short-term rate is projected to fall to 4.1 percent by 2012. At that level, the real rate on 91-day Treasury bills would be close to its historical average.

The yield on 10-year Treasury notes on November 13 was 4.61 percent, 48 basis points below the discount rate on the 91-day Treasury bills—a noticeable reversal of the usual pattern which shows higher rates for long-term yields. The Administration expects the 10-year rate to increase above the 91-day rate during 2007, eventually reaching a more normal spread of about 1.2 percentage points by 2010. An increase of a similar magnitude appears to be expected by market participants (as evidenced by higher rates on 20- and 30-year Treasury notes than on notes with 10-year maturities). As a result, yields on 10-year notes are expected to increase somewhat further, reaching a plateau at 5.3 percent from 2010 onward.

The Long-Term Outlook Through 2012

Coming off a fifth year of expansion, the U.S. economy is settling into a period of steady growth. Having reached a high level of resource utilization by year-end 2006, growth is likely to slow in 2007 and then will expand through 2012 at around 3.0 percent. Inflation will remain low and is expected to edge a bit lower, and the labor market will remain firm (Table 1-1). The forecast is based on conservative economic assumptions that are close to the consensus of professional forecasters. These assumptions provide a sound basis for the Administration's budget projections.

TABLE 1-1.—*Administration Forecast* [1]

Year	Nominal GDP	Real GDP (chain-type)	GDP price index (chain-type)	Consumer price index (CPI-U)	Unemployment rate (percent)	Interest rate, 91-day Treasury bills [2] (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employment (millions)	Nonfarm payroll employment (average monthly change, Q4-to-Q4 thousands) [3]
	Percent change, Q4-to-Q4				Level, calendar year				
2005 (actual)	6.4	3.1	3.1	3.7	5.1	3.1	4.3	133.5	160
2006.....	5.9	3.1	2.7	2.3	4.6	4.7	4.8	135.3	151
2007.....	5.5	2.9	2.5	2.6	4.6	4.7	5.0	137.0	129
2008.....	5.5	3.1	2.3	2.6	4.8	4.6	5.1	138.6	139
2009.....	5.3	3.1	2.2	2.5	4.8	4.4	5.2	140.2	126
2010.....	5.2	3.0	2.1	2.4	4.8	4.2	5.3	141.5	113
2011.....	5.0	3.0	2.0	2.3	4.8	4.1	5.3	143.0	118
2012.....	5.0	2.9	2.0	2.3	4.8	4.1	5.3	144.3	107

[1] Based on data available as of November 13, 2006.

[2] Discount basis.

[3] If the effect of the BLS benchmark adjustment were included, monthly job growth would average 202 and 191 thousand in 2005 and 2006 respectively. The level of payroll employment would be 133.7 and 136.2 million in these 2 years.

Sources: Council of Economic Advisers, Department of Commerce (Bureau of Economic Analysis and Economics and Statistics Administration), Department of Labor (Bureau of Labor Statistics), Department of the Treasury, and Office of Management and Budget.

Growth in GDP over the Long Term

The Administration projects that, following a slight pickup of growth from 2007 to 2008, real GDP will increase at a slowly diminishing rate from 2008 through 2012. Indeed, real GDP is projected to decelerate from a 3.1 percent rate of growth during the four quarters of 2008 to 2.9 percent by 2012. The average growth rate during this interval is roughly in line with the consensus of private forecasters for those years. After 2007, the year-by-year pace is close to the estimated growth rate of potential real GDP, a measure of the rate of growth of productive capacity. (An economy is said to be growing at its potential rate when all of its resources are utilized and inflation is stable. The supply-side components of potential GDP growth are presented in Table 1-2 and are discussed below). The unemployment rate is projected to edge up in 2007 (from its 4.5 percent level in the fourth quarter of 2006) and to plateau at 4.8 percent in 2008. As discussed below, potential GDP growth is expected to slow in the near term as productivity growth reverts toward its long-run trend (about 2.6 percent per year), and to slow further during the 2007-to-2011 period as labor force growth declines due to the retirement of the baby-boom generation.

The growth rate of the economy over the long run is determined by its supply-side components, which include population, labor force participation,

the ratio of nonfarm business employment to household employment, the length of the workweek, and labor productivity. The Administration's forecast for the contribution of the growth rates of different supply-side factors to real GDP growth is shown in Table 1-2.

TABLE 1-2.— *Supply-Side Components of Real GDP Growth, 1953–2012*
[Average annual percent change]

Item	1953 Q2 to 1973 Q4	1973 Q4 to 1995 Q2	1995 Q2 to 2001 Q1	2001 Q1 to 2006 Q3	2006 Q3 to 2012 Q4
1) Civilian noninstitutional population aged 16+ [1]	1.6	1.4	1.2	1.2	1.0
2) Plus: Civilian labor force participation rate	0.2	0.4	0.1	-0.3	-0.2
3) Equals: Civilian labor force [2]	1.8	1.8	1.4	1.0	0.8
4) Plus: Civilian employment rate	-0.1	0.0	0.3	-0.1	0.0
5) Equals: Civilian employment [2]	1.7	1.8	1.7	0.9	0.8
6) Plus: Nonfarm business employment as a share of civilian employment [2 3]	-0.1	0.1	0.4	-0.7	0.1
7) Equals: Nonfarm business employment	1.6	1.9	2.0	0.2	0.8
8) Plus: Average weekly hours (nonfarm business)	-0.3	-0.3	-0.1	-0.2	0.0
9) Equals: Hours of all persons (nonfarm business)	1.3	1.6	1.9	0.0	0.8
10) Plus: Output per hour (productivity, nonfarm business)	2.5	1.5	2.4	3.1	2.6
11) Equals: Nonfarm business output	3.8	3.1	4.3	3.0	3.4
12) Plus: Ratio of real GDP to nonfarm business output [4]	-0.2	-0.2	-0.5	-0.3	-0.4
13) Equals: Real GDP	3.6	2.8	3.8	2.7	3.0

[1] Adjusted by CEA to smooth discontinuities in the population series since 1990.

[2] BLS research series adjusted to smooth irregularities in the population series since 1990.

[3] Line 6 translates the civilian employment growth rate into the nonfarm business employment growth rate.

[4] Line 12 translates nonfarm business output back into output for all sectors (GDP), which includes the output of farms and general government.

Note: 1953 Q2, 1973 Q4, and 2001 Q1 are NBER business-cycle peaks. Detail may not add to total because of rounding.

Sources: Council of Economic Advisers, Department of Commerce (Bureau of Economic Analysis), and Department of Labor (Bureau of Labor Statistics).

As can be seen in the fourth column of the table, the mix of supply-side factors determining real GDP growth has been unusual since the business-cycle peak at the beginning of 2001. The high rate of productivity growth (3.1 percent at an annual rate, shown in line 10) has been partially offset by the decline in the participation rate (line 2) and the workweek (line 8). Also notable is the large and puzzling decline in the ratio of nonfarm business employment to household employment (line 6). This unusual decline reflects the slow growth of employment as measured by the payroll survey (which asks employers to report the number of jobs) relative to the more rapid growth of employment as measured by the household survey (which estimates the number of employed persons through a sample of households). This disparity

has been reduced somewhat by the just-issued benchmark revision to payroll employment, but has yet to be satisfactorily explained.

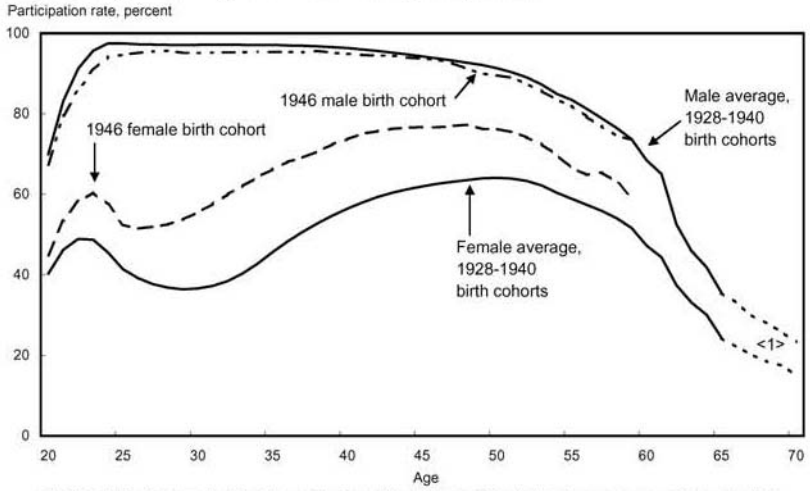
The participation rate fell, on net, from 2001 to 2006 (although it ticked up in 2006), and is projected to trend lower through 2012. The recent behavior stands in contrast to the long period of increase from 1960 through 1996. Looking ahead, the participation rate is projected to decline, reflecting the aging of the baby-boom cohorts, leading to more retirements and a likely increase in the share of people on disability pensions (see Box 1-2).

Box 1-2: Long-Term Prospects for Labor Force Participation

The overall rate of labor force participation is projected to decline as the baby-boom cohorts advance into age brackets with much lower participation rates. Participation in the labor force (by working or by looking for a job) declines as people age through their 50s and 60s, as can be seen in the following chart.

Labor Force Participation Rates By Age

This age-participation profile follows the same birth cohorts as they get older. Participation rates for men and women edge down during their 50's and fall sharply during their 60's.



<1> Not all 13 cohorts are included in participation estimates for age 65 and older because some cohorts are still too young. These participation rates have been adjusted to account for the reduced number of cohorts.

Source: Department of Labor (Bureau of Labor Statistics) with interpolations by Council of Economic Advisers.

This chart shows the estimated average lifetime age-participation profile for the 13 cohorts born from 1928 to 1940. Men's participation is high (exceeding 90 percent) from age 24 through age 50, but then declines thereafter, dropping to 83 percent by age 55 and 36 percent by age 65. The rate of labor force exit is particularly rapid around 62, the

continued on the next page

Box 1-2 — *continued*

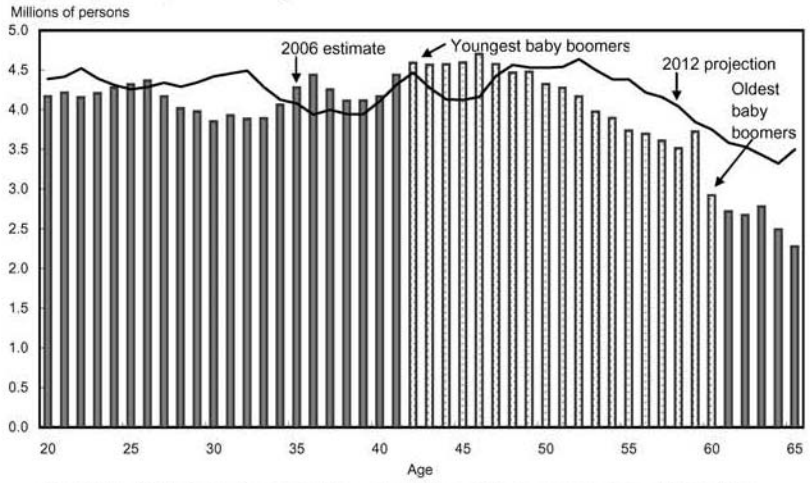
age at which one becomes eligible for early Social Security retirement benefits. In fact, about 40 percent of those eligible elect to begin collecting Social Security annuities at age 62, although this does not necessarily mean that they exit the workforce.

The difference between the age-participation profile of this 1946 cohort (the dotted lines) and those of its elders illustrates how participation rates have evolved over time. Female participation rates have moved sharply upward—in a roughly parallel shift. In contrast, male participation rates have changed little over time, moving down only slightly.

The current age distribution of the U.S. population is shown by the bars in the following chart, and the black line shows an estimate of the age distribution of the population in 2012. The large baby-boom cohorts (who were born between 1946 and 1964) are now 42 to 60 years old, and their aging will shift a sizeable fraction of the population into age brackets with lower participation rates, thus decreasing the share of the population in the high-participation ages.

U.S. Population By Age

Because of the aging of the baby-boom generation, the U.S. population in 2012 will have many more people of ages 55-65, and fewer of ages 35-45.



Note: October 2006 estimates from Census Bureau. The 2012 population is projected using growth factors from Census Bureau's 2004 Interim Projections applied to 2006 population estimates.

Sources: Department of Commerce (Census Bureau) and Council of Economic Advisers.

An extrapolation that moves the participation rate of each cohort along a path that parallels the 1928–1940 reference cohort and projects how the aging of the population translates into participation rates suggests an average participation rate decline of roughly 0.3 percent per year. A decline of this magnitude would alter a wide range of labor-market behaviors. In response to the emerging shortage of experienced workers, real wages are likely to increase and workweeks are likely to lengthen. Labor productivity is likely to increase as employers invest in labor-saving capital. And more immigrants may enter the U.S. labor force. The largest effect of the baby–boom retirements, however, is likely to be an endogenous effect on the labor force participation rate itself as developments in pay and pension arrangements evolve to induce higher participation rates among experienced workers than our extrapolation would suggest.

The Composition of Income over the Long Term

The Administration's economic forecast is used to estimate future government revenues, a purpose that requires a projection of the components of taxable income. The income-side projection is based on the historical stability of labor compensation as a share of gross domestic income (GDI). During the first half of 2006, the labor compensation share of GDI was 56.7 percent (according to the preliminary data available when the projection was finalized), slightly below its 1963–2005 average of 58.1 percent. From this jump-off point, the labor share is projected to slowly rise to 57.8 percent by 2012.

The labor compensation share of GDI consists of wages and salaries (which are taxable), non-wage compensation (employer contributions to employee pension and insurance funds—which are not taxable), and employer contributions for social insurance (which are not taxable). The Administration forecasts that the wage and salary share of compensation will be approximately flat between 2007 and 2012. Employer contributions to defined-benefit pension plans rose by almost 1 percentage point of total compensation between 2001 and 2002, boosting the growth of non-wage compensation. Contributions leveled off and then edged lower in subsequent years.

The capital share of GDI is expected to edge down from its currently high level before eventually reaching its historical average in 2012. Within the capital share, private depreciation is expected to increase (as a result of the strong growth of investment during the past 3 years). Profits during the first

three quarters of 2006 were about 12.2 percent of GDI, well above their post-1959 average of roughly 9 percent. Book profits (also known in the national income accounts as *profits before tax*) are expected to decline as a share of GDI.

The GDI share of other taxable income (rent, dividends, proprietors' income, and personal interest income) is projected to edge up slightly over the next 2 years.

Conclusion

With the rapid-growth period of the expansion fading into the past, the economy is currently going through a period of rebalancing, where higher growth of nonresidential investment and exports are offsetting the lower rates of housing investment. The economy is projected to settle into a steady state in which real GDP grows at about 3 percent per year, the unemployment rate creeps up towards a noninflationary level (of 4.8 percent) and inflation remains moderate and stable (about 2.2 to 2.6 percent on the CPI). Consumer spending is projected to grow in line with disposable income, and business investment and exports are projected to grow a bit faster than GDP as a whole. Economic forecasts are subject to error, and unforeseen positive and negative developments will affect the course of the economy over the next several years. Given the economy's fundamental strengths, however, prospects for continued growth in the years ahead remain good. Nonetheless, much work remains in making our economy as productive as possible. Later chapters of this *Report* explore how pro-growth policies such as tax reform, fiscal restraint, open commerce, and enhancing our energy security can enhance our economic performance.